



# System Driven Workarounds

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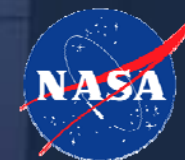
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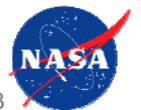
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**AVIATION SAFETY  
REPORTING SYSTEM**



# Agenda

- Overview of ASRS
- Dispatcher Reporting and Safety Alerts
- System Driven Workarounds



# ASRS Purposes

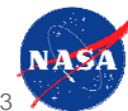
- **Identify** deficiencies and discrepancies in the National Airspace System
  - Objective: Improve the current aviation system
- **Provide data** for planning and improvements to the future National Airspace System
  - Objective: Enhance the basis for human factors research & recommendations for future aviation procedures, operations, facilities, and equipment



# FAA and NASA Partnership

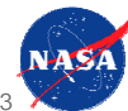
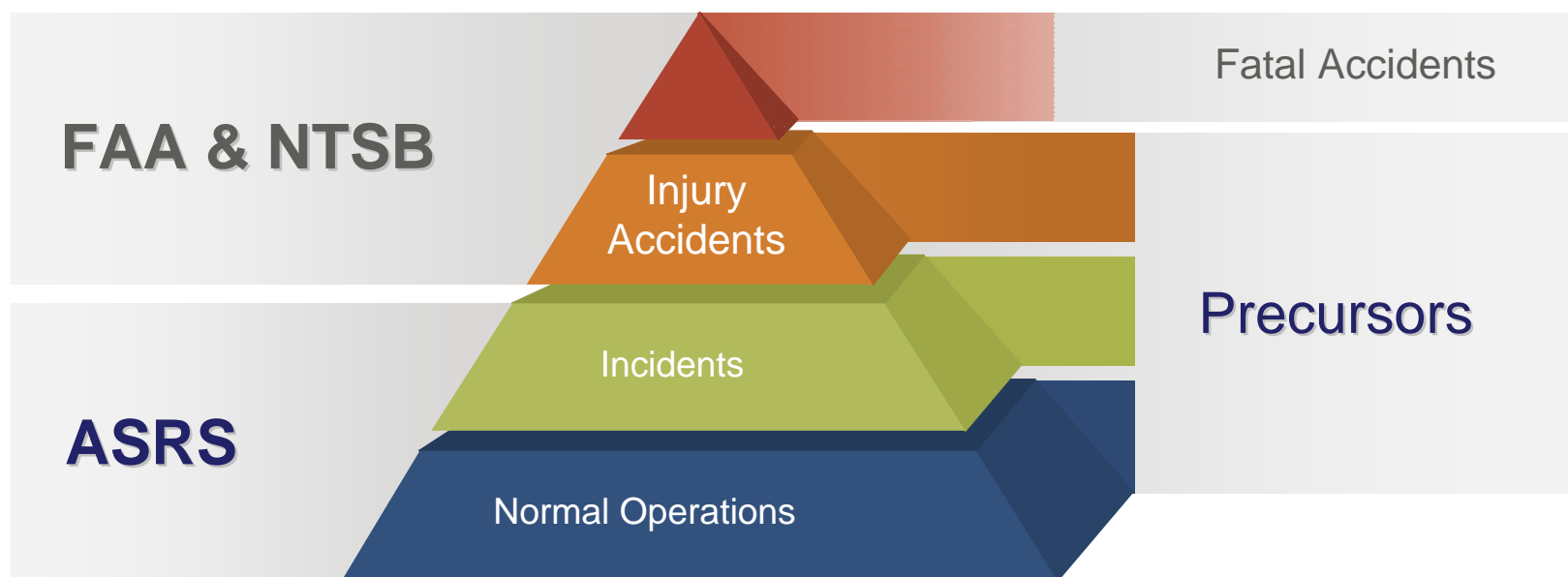
- **MOA signed by Administrators for FAA and NASA**

... To provide information to the FAA and the aviation community to assist them in reaching the goal of identifying and eliminating unsafe conditions to prevent accidents.



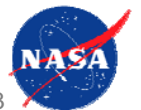
# System-Wide Event Occurrences

- ASRS is complementary to other systems of reporting and focuses on precursors to the most severe events

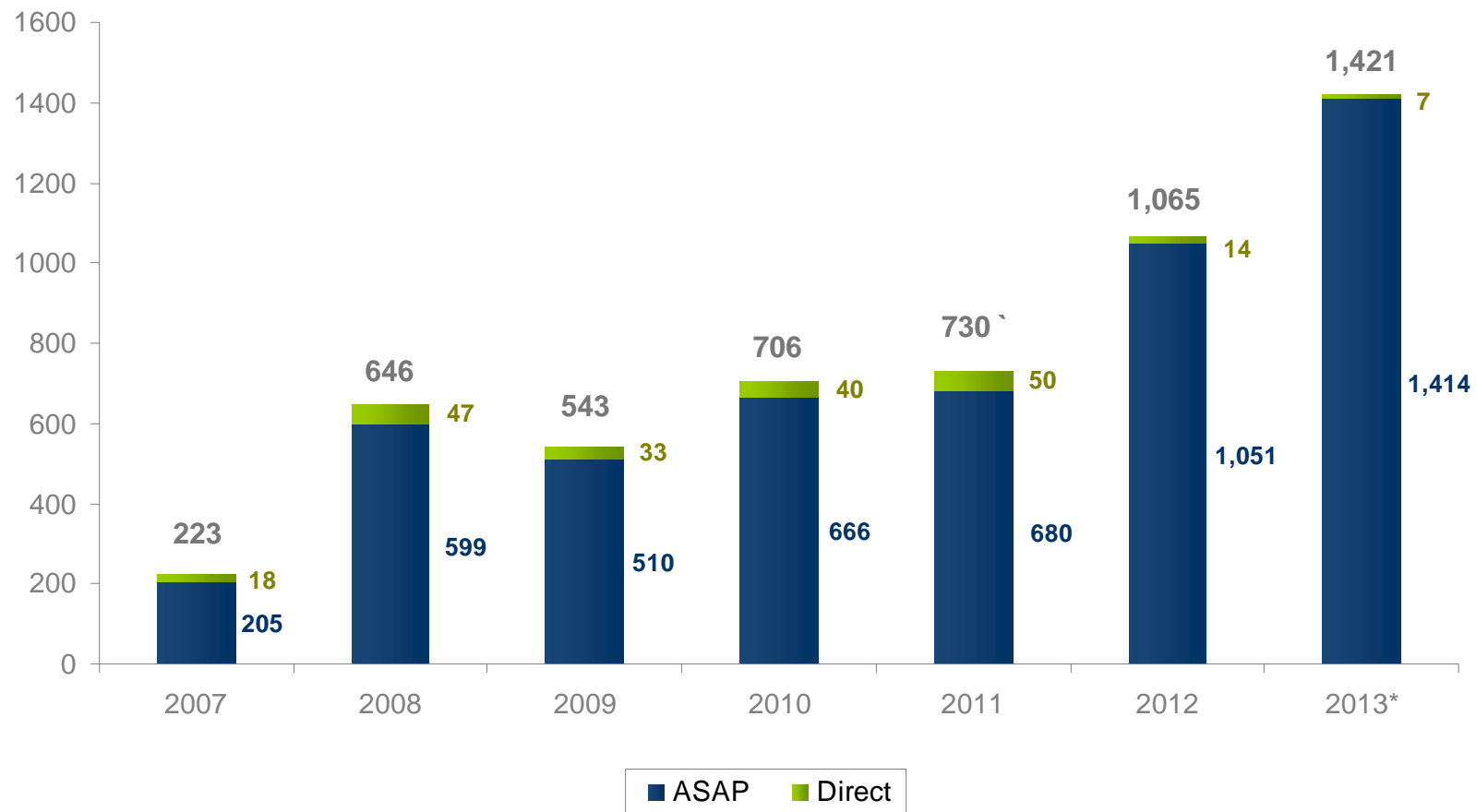


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# Dispatch Reporting to ASRS

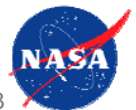


\*Data complete through August 28<sup>th</sup>.



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# ASRS Alert Message Priorities



ASRS has no direct authority to directly correct safety issues.  
It acts through and with the cooperation of others.



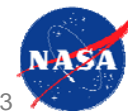
# Dispatch Related Alerts

- HDN VOR DME-B Approach
- Dash 8-400 Performance Data Availability
- Company Fuel Policies Affecting Flight Safety
- SJU Runway 26 Displacement
- SMF Transponder "Dead Zone" on Taxiway A10
- PDC Anomaly for SLC WEVIC One RNAV SID



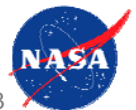
# Dispatch Related Alerts – Responses

- SJU Runway 26 Displacement
  - ASRS received a call from the San Juan Airport Office, stating “...*they have taken care of the confusion regarding the NOTAM for Runway 8. The 10,000 foot runway has been reduced by 220 feet, leaving 9,780 feet of useable runway. The 220 feet is the new displaced threshold. They also relocated the Runway 8 ILS. It was indicated that all these changes have been covered by a new NOTAM. We were also informed that the Runway 26 VASI is OTS UFN.*”
- SMF Transponder "Dead Zone" on Taxiway A10
  - ASRS received a call from the SMF Airport Operations Officer stating “...*a NOTAM was issued to address this issue.*”



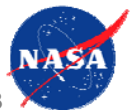
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# System Driven Workarounds

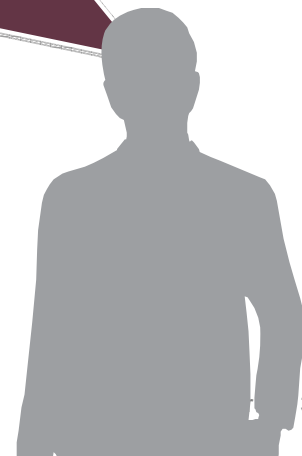
- Software Issues
  - Weather Decoding
  - Uncommanded Restarts
  - Frozen Workstations
  - Missing Information



# Software Workarounds

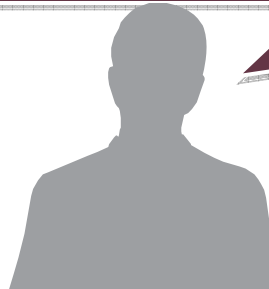
*"[Our new dispatching software] continues to give bad information. It must be programmed to recognize a single runway. When that runway is currently closed it assumes the airport is closed and recommends an alternate. A flight can NOT be dispatched to a closed airport. Adding an alternate doesn't matter. It's recommending illegal advice."*

*(ACN 1077764 Excerpt)*



# Software Workarounds

*“...Ghost restricted areas on our software...I noticed on of my [transcon] flights had an odd routing. I fixed it, built my own route and moved on. Next flight I attempted to use the wind route hook up. The plan did a strange zig-zag. I had [The Chief Dispatcher] look into this. There were ACTIVE restricted areas on my desk. Put in by other dispatchers currently working the floor...yet not visible on the map. Later I went back to the flight to add an alternate. [The software] re-optimized my old route and put the flight back on the zig-zag. I did not catch this. I should not have to. The Captain called, irrate.” (ACN 1084077 Excerpt)*

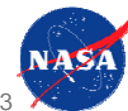


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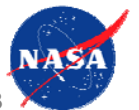
# System Driven Workarounds

- Same Flight Numbers
  - Multiple airborne aircraft with same flight numbers
  - Uncoordinated modifications of flight numbers
    - Adding same suffix
  - Lack of safeguards
    - Having to remember altered flight numbers before release



# Same Flight Number Workarounds

*“... radio number was required to be added to my LAX-ZZZ flight to avoid a conflict with the late arriving inbound flight of the same number. I complied with this by adding a suffix [X] to the call sign...what I was not aware of was that my counterpart on the sector next to me had also added the same radio number suffix [X] to his flight with the same flight number. I was not advised in any messaging alert that this radio number was already in use...we ended up having two flights with the same radio number active at the same time on LAX ATC frequencies....” (ACN 1084047 Excerpt)*



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# Same Flight Number Workarounds

*“The Operational Control Center had a total computer failure. After the systems were back up we found out that there were two flights on the ground at [the same airport], at the same time with the same flight number. One was taxiing in, and the flight number under my control was taxiing out. We did not receive a warning about the flight number conflict.” (ACN 922401 Excerpt)*

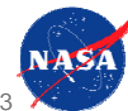


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# System Driven Workarounds

- Alternate Routing Issues
  - Recommending routes into weather
  - Multiple redundant messages
    - Distracting
    - Increased workload
    - Increased stress level
  - No alternate scenario recommendations



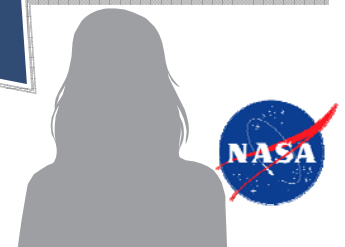
# Alternate Routing Workarounds

*“System is advising the Dispatcher to violate FAR 121.619. Because of Dispatcher interaction, ZZZ2 was added as alternate for ZZZ1 thus ignoring the automated message advising to violate FAR 121.619. ...program does not understand what is required to determine alternate weather minimums per FAR 121.619. ...Eliminate [this program] until this product can provide a useful purpose to the Dispatcher, otherwise it will continue to mass produce unnecessary messages that will be ignored since it is advising inaccurate and false direction for the Dispatcher to implement...” (ACN 1083639 Excerpt)*



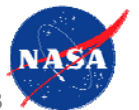
# Alternate Routing Workarounds

*“The pilot of one of my flights requested a takeoff clearance via ACARS. I was pressed by other simultaneous tasks and executed a rapid scan of possible alternates. I found [an airport] that looked to me as one of the best and I amended the release via ACARS... After the flight took off and I completed all the other pressing tasks I reviewed the weather...and realized that [the alternate] did not have legal alternate minimums.... The major threat element I can identify for this incident was the extremely high workload.... It is extremely difficult and challenging to maintain situational awareness when you have 10 or more flights en route, more flights on the ground facing long ground delays, adverse weather that is constantly changing, and on top of that you need to plan, re-plan and amend flights...” (ACN 998849 Excerpt)*



# Summary of System Driven Workarounds

- Excessive workload and fatigue effects situational awareness and responsibilities
- Lack of procedures for handling multiple flights with same flight number create opportunity for confusion
- Understaffing potentially causes FAR compliance challenges in planning and briefings
- Multiple carriers are experiencing issues with software changes, implementation and modifications



# Contact Information

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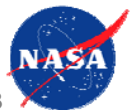
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